

Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office

22 NOV 1933

Date of writing Report 10 When handed in at Local Office 21st Nov 1933 Port of Belfast

No. in Survey held at Belfast Date, First Survey 8th Aug Last Survey 2nd Nov 1933

on the Machinery of the Wood, Iron or Steel Sc. CITY OF KIMBERLEY (No. of Visits 16)

Gross 6204 Vessel built at W. Harlepool By whom W. Gray & Co. Ltd. When 1925-4

Net 3980 Engines made at W. Harlepool By whom Gen. Mar. Eng. Works When 1925

Power 682 Boilers, when made (Main) 1925 (Donkey)

Main Boilers 3 Owners Ellerman & Bucknall S.S. Co. Ltd. Owners' Address

Donkey Boilers 1 Managers (if not already recorded in Appendix to Register Book.)

Pressure 225 lb Port London Voyage

Donkey Boilers 1 If Surveyed Afloat or in Dry Dock Alexandra, D.D. (State name of Dock.)

Report No. Port

Particulars of Examination and Repairs (if any) L.M.C. & Initial Exh. Int.

When held, must be reported in detail and serially in the terms of the Rules. State clearly the nature and extent of examinations and subsequent repairs. Repairs on damage (the cause of which must be stated) should be separated from repairs due to other causes; and the details of any letters respecting this case.

Where cases where the Surveyor has not made a special damage report he is required to state whether he has made his services or this purpose, and why they were declined.

Damage report made by anyone else? If so, by whom?

Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? No.

" Donkey "

As not done, state for what reasons?

Boiler Survey not due

Parts of the Boilers could not be thus thoroughly examined?

Special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?

Surveyor examine the Safety Valves of the Main Boiler?

To what pressure were they afterwards adjusted under steam?

Surveyor examine the Safety Valves of Donkey Boiler?

To what pressure were they afterwards adjusted under steam?

Surveyor examine all the manholes, doors and their fastenings of the Main Boilers?

, and of the Donkey Boilers?

Surveyor examine the drain plugs of the Main Boilers?

, and of the Donkey Boiler?

Surveyor examine all the mountings of the Main Boilers?

, and of the Donkey Boiler?

Shaft now been drawn and examined? Yes 18/10/33

Is it fitted with continuous liner? Yes

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? No

Shaft now been changed? No If so, state reasons

Shaft now fitted been previously used?

Has it a continuous liner?

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

Distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft A good fit lower half bush re wooded.

Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete.

Placed in dry-dock Propeller, screw shaft, sea-connections & outside fastenings examined.

Exhaust cylinders, pistons, slide valves, crank, thrust & tunnel shafts, condenser, air, circulating, feed, bilge auxiliary pumps & their connections, the steering engine & windlass & the electric light installation & valve chest examined & the valve renewed. Condenser and circulating pumps renewed.

The exhaust turbine geared to generator and the propulsion motor, the details of which are given in the Manchester Report No 7884 have been satisfactorily installed in the vessel. The turbine & generator have been fixed on the tween deck flat on the port side of the main engine room. The motor has been directly coupled to the main line shafting & fixed at the after end of the main engine room in the tunnel recess. The line shafting aft of the propulsion engine except for one making up length has not been renewed and is 14" dia, as approved. (See letter dated 10th May 1933) The thrust shaft which is fitted forward of the propulsion motor has been renewed and a Mitchell thrust block fitted. The main thrust shaft is 15" dia and is stamped.

General Observations, Opinion, and Recommendation:—The machinery of this vessel is eligible for entry, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9, 11, B.A.M.S. 9, 11, or L.M.C. 9, 11, &c.) In opinion, to remain as classed in the Register Book, with a fresh record of MS. 11, 33.

10, 33 Nominal HP 682 and description L.P. turbine with electric drive.

Fee (per Section 20) £ 10 : 0 : 0 Fees applied for 21st Nov 1933

Damage or Repair Fee (if any) £ : : Received by me, 16.12.1933

Expenses (if chargeable) £ : :

Committee's Minute FRI. 8 DEC 1933

Signed + dmb. MS. 11.33

CERTIFICATE WRITTEN 10.1.34

013449-013453-0103

John K. Williams & Lee Ames

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

as on the enclosed forging report. The length of line shafting is 14 $\frac{1}{4}$ " dia & stamped

LLOYDS No
4610
J.K.W. 28/9/35.

A new main condenser together with a Weir Augmentor Plant, main injection valve, overboard discharge valve and suction & discharge pipes fitted.

Main engine exhaust pipes renewed and fitted with change over valves to plant & condenser.

A new Drysdal Thermal main circulating pumps & engine fitted.

A standby Weir Lubricating Oil Pump, together with its connections for lubricating generator plant fitted on Tween deck flat.

Various feed pipes & ledge pipes have been renewed to fit in with the new arrangement & tested under hydraulic pressure to rule requirements.

The main engines were partly dismantled for access and refitted in good order.

The electric cables, connections & fittings were fitted in the vessel under survey & to the approved plans, and a megger test made.

The main and auxiliary machinery was tried out at a sea trial with satisfactory results. The main engines were manoeuvred with the turbo-generator working and the power on the propelling motor and the various cut outs worked satisfactorily.

New bronze propeller fitted 18'-6" dia.

The maximum IHP developed was, reciprocating engine 2780.

Turbine

1150

Total. 3930 at 83.5 revs.

cut off 35 $\frac{3}{4}$ "